

CLAIMS

1. A method for recording and reproducing information at multiple levels, comprising steps of:
recording an information-coding pit at one of
5 multiple levels in each of recording domains placed successively on a track of an optical information recording medium by utilizing combination of a width in a track direction of an information-coding pit and a position in the track direction of the information-
10 coding pit;
detecting reproduced signals at two or more positions in the recording domain;
reproducing the information according to judgment of the width of the information pit by comparison of the
15 reproduced signals with a predetermined threshold width value and judgment of the shift direction and/or shift degree by comparison with levels of the plural reproduced signals.
2. The method according to claim 1, wherein the
20 reproduced signal is detected at a time when the center of the reproducing light spot has come to the center of the width in the track direction of the information-coding pit.
3. An apparatus for recording and reproducing
25 information in multiple levels, comprising:
an information-recording circuit for recording an information-coding pit at one of multiple levels in

each of recording domains placed successively on a track of an optical information recording medium by utilizing combination of a width in a track direction of an information-coding pit and a position in the track direction of the information-coding pit;

5 a detecting circuit for detecting reproduced signals at two or more positions in the recording domain;

an information reproducing circuit for reproducing the information according to judgment of the width of

10 the information pit by comparison of the reproduced signals with a predetermined threshold width value and judgment of the shift direction and/or shift degree by comparison with levels of the plural reproduced signals.